

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) ~~An application provision system for use in a server, the server being connected to a network through a communication link, the network comprises at least one client and at least one server, the application provision system for providing a requested application to a client, the application provision system comprising:~~

~~a server;~~

~~a client comprising an operating system and a browser;~~

~~a communication link operatively connecting the server and the client;~~

~~a server resident process on the server for controlling the application provision system, and for providing a requested application from the server to the client;~~

~~a database comprising information for the location of files associated with an application that can be installed on the client;~~

~~a platform independent executable program deliverable by the server to the client for execution thereon;~~

~~a browser hosted process on the client resulting from execution of the platform independent executable program on the client;~~

~~a communication pipe established by the browser hosted process, the communication pipe being bidirectional, and enabling exclusive communication between the server resident process on the server, and the browser hosted process on the client, the browser hosted process accessing resources of the operating system on the client by installing, invoking or reading output from, executable files on the client.~~

~~resident process controlling the application provision system, and providing a requested application to a client; and~~

~~client server functionality deliverable to the client, the client server functionality communicating with the server resident process through a communication pipe, and interacting directly with an operating system resident on the client; the communication pipe being part of the communication link.~~

2. (original) An application provision system according to claim 1 wherein the server resident process includes a common gateway interface.

3. (currently amended) An application provision system according to claim 1 wherein the ~~client server functionality is a platform independent executable program~~ is attached to a web page.

4. (currently amended) An application provision system according to claim ~~[[3]]~~ 1 wherein the platform independent executable program is a Java applet.

5. (currently amended) An application provision system ~~for use in a server, the server being connected to a network through a communication link, the network comprises at least one client and at least one server, the client comprising an operating system and a browser, the application provision system for providing a requested application to a client, the application provision system comprising:~~

a server resident process on a server, the server connected to the client through a communication link, the server resident process controlling the application provision system and being able to respond to queries from the client;

a database comprising information for the location of files associated with an application that can be installed on the client;

a file deliverable to the client, the file including a platform independent executable program and parameter information; the file executable on the client resulting in a browser hosted process, the browser hosted process establishing a bidirectional exclusive communication pipe and between the server resident process on the server and an operating system on the client; and

the ~~a~~ exclusive communication pipe being within the communications link; wherein the server resident process interacts with the browser hosted process through the exclusive communication pipe; and wherein the browser hosted process accesses resources of the operating system on the client, installs, invokes or reads output from executable files on the

~~client, the platform independent executable program communicating with the server resident process through the communication pipe, and interacting directly with the operating system of the client such that the server resident process is able to perform operations within the operating system of the client.~~

6. (cancelled)

7. (original) An application provision system according to claim 5 wherein the application provision system further comprises;

at least one file associated with at least one application wherein the application is installable on the client; and

at least one web page for downloading to the browser located on the client.

8. (original) An application provision system according to claim 5 wherein the file deliverable to the client includes a Java applet.

9. (original) An application provision system according to claim 5 wherein the server resident processes includes a common gateway interface.

10 –13. (cancelled)

14. (currently amended) A method of providing a requested application from a server to a client by an application provision system, the method comprising the steps of:

providing a first web page to a client, the first web page ~~containing~~ having at least one a link associated with a document;

receiving from the client a request for the document by a server resident process; ~~from a client;~~

providing a second web page to ~~a the~~ the client, the second web page having a platform independent executable program client-server functionality, the platform independent executable program client-server functionality-executable on the client resulting in a browser hosted process, the browser hosted process communicating with the server resident process through establishing a bidirectional exclusive communication pipe[[,]] between the server resident process on the server and an operating system on the client; the exclusive communication pipe being part of the communication link, wherein the server resident process interacts with the browser hosted process through the exclusive communication pipe; and wherein the browser hosted process accesses resources of the operating system

~~on the client, interacting directly with an operating system resident on the client, and requesting requests~~ an application to access the requested document; and

providing the requested application to the client wherein the requested application allows the client to access the requested document.

15. (previously presented) A method of providing a requested application according to claim 14 wherein the step of providing the application provides the entire application to the client.

16. (previously presented) A method of providing a requested application according to claim 14 wherein the step of providing the application provides selected files associated with the application to the client to update an existing instance of the application on the client.

17. (currently amended) A method of receiving a requested application from a server ~~to by a client by in~~ an application provision system, the method comprising the steps of:

receiving a first web page from a server, the first web page ~~containing~~ having a at least one link associated with a document;

providing a request for the document to a server resident process, ~~from by the~~ [[a]] client;

receiving a second web page from [[a]] the server, the second web page having a platform independent executable program client-server functionality, the platform independent executable program client-server functionality executable on the client resulting in a browser hosted process, the browser hosted process establishing communicating with the server resident process through a bidirectional exclusive communication pipe between the server resident process on the server and an operating system on the client; the exclusive communication pipe being part of the communication link, wherein the server resident process interacts with the browser hosted process through the exclusive communication pipe; and wherein the browser hosted process accesses resources of the operating system on the client, and requests, ~~interacting directly with an operating system resident on the client, and requesting~~ an application to access the requested document; and

receiving the requested application from the server wherein the requested application allows the client to access the requested document.

18. (previously presented) A method of receiving a requested application according to claim 17 wherein the step of receiving the application receives the entire application from the client.

19. (previously presented) A method of receiving a requested application according to claim 17 wherein the step of receiving the application receives selected files associated with the application from the server to update an existing instance of the application on the client.

20. (currently amended) A method of providing a requested application from a server to a client connected to a network through a communication link, ~~the network comprising at least one client and at least one server;~~ the ~~at least one~~ server comprising ~~at least one~~ a web page for downloading by the ~~at least one~~ client, the method comprising the steps of:

providing a platform independent executable program ~~client-server functionality~~, and a server resident process on a server;

delivering the platform independent executable program ~~client-server functionality~~ to the client during the downloading of a web page to which the platform independent executable program ~~client-server functionality~~ is attached, the platform independent executable program ~~client-server functionality~~ executable on the client resulting in a browser hosted process, the browser hosted process interacting directly with an operating system resident on the client;

receiving a request for an application from the browser hosted process ~~client-server functionality~~, the browser hosted process ~~the client-server functionality~~ communicating with the server resident process through an exclusive communication pipe, the exclusive communication pipe being part of the communication link; and

providing ~~by way of the server resident process~~ the requested application to the client, through the browser hosted process and the server resident process ~~the client-server functionality~~.

21. (currently amended) A method of automatic provisioning of a requested application from a server to a client~~[[;]],~~ the server and the client being connected ~~to a network through a communication link,~~ the network including at least one client and at least one server, the client ~~operating comprises~~ a browser and an operating system, the method comprising the steps of:

downloading a first web page containing ~~at least one~~ a link, the link being associated with a document, by the client from the server ~~to which the client is connected and in communications through a communication link;~~

selecting the link on the downloaded first web page;

downloading a second web page by the client from the server, the second web page comprising a platform independent executable program ;

opening a new window of the browser ~~operating on the client~~;

invoking the platform independent executable program resulting in a browser hosted process, the browser hosted process ~~platform independent executable program~~ interacting directly with an operating system of the client;

invoking ~~at least one a~~ server resident process, the server resident process communicating with the browser hosted process ~~client server functionality~~ through a bidirectional exclusive communication pipe, the exclusive communication pipe being part of the communication link;

scanning the client, by the browser hosted process ~~platform independent executable program~~ to determine if the requested application is installed on the client;

providing the requested application to the client if the requested application is not installed on the client; and

invoking the requested application.

22. (cancelled)

23. (currently amended) A method according to claim 21 wherein the step of providing the requested application to the client comprises the steps of:

providing a setup executable file associated with the requested application by the server to the client, if the setup executable file is absent on the client;

installing the setup executable file on the client, ~~if the setup executable is absent on the client~~;

invoking the setup executable file;

providing files associated with a requested version of the requested application by the setup executable file from the server to the client; and

installing native components on the client such that the native components do not

interfere with the operating system of the client.

24. (previously presented) A method according to claim 21 wherein the step of providing the requested application comprises the steps of:

determining if a version of the requested application previously installed on the client is the same as a version of the requested application located on the server; and

installing the requested application on the client if the version of the requested application installed on the client is not the version of the requested application located on the server.

25. (cancelled)

26. (currently amended) A method of automatically provisioning a requested application from a server to a client; the server and client being ~~elements of a network~~ connected through a communication link, the client ~~operating comprising~~ a browser and an operating system, the method comprising the steps of:

providing a first web page to the client, the first web page having a link, the link being associated with a document ~~wherein the document is~~ accessible with the requested application;

receiving a request for a second web page by way of the client selecting the link associated with the document;

providing the second web page to the client, the second web page comprising a platform independent executable program executable on a client resulting in a browser hosted process, the browser hosted process ~~platform independent executable program~~ interacting directly with an operating system of the client;

receiving communications from the browser hosted process ~~platform independent executable program~~ through an exclusive communication pipe, the exclusive communication pipe being part of the communication link ;

invoking a server resident process;

communicating with the browser hosted process ~~platform independent executable program~~ located on the client to facilitate determination of whether the requested application

is installed on the client;

providing files associated with the requested application to the client for installation of the requested application on the client, if the requested application is not installed on the client;

transferring files associated with the requested application to the client for installation of the application on the client; and

invoking the requested application.

27. (currently amended) A method according to claim 26 wherein the step of providing files comprises the steps of:

providing a setup executable program associated with the requested application by the server to the client, if the setup executable program does not exist on the client;

installing the setup executable program on the client, ~~if the setup executable program does not exist on the client;~~

invoking the setup executable program;

providing files associated with a requested version of the requested application by the setup executable program from the server to the client; and

installing native components on the client such that the native components do not interfere with the operating system of the client.

28. (currently amended) A method according to claim 26 wherein the step of providing files comprises the steps of:

comparing version information of the requested application installed on the client with version information of the requested application located on the server ~~if it was determined that the requested application was installed on the client;~~ and

transferring files associated with the requested application to the client for installation of the requested application on the client if the version of the requested application on the client is not the same as the version of the application located on the server.

29 - 31. (cancelled)

32. (new) A storage medium readable by a computer encoding a computer program for execution by the computer to carry out a method for providing a requested application from a server to a client by an application provision system, the computer program comprising:

code means for providing a first web page to a client, the first web page having a link associated with a document;

code means for receiving from the client a request for the document by a server resident process;

code means for providing a second web page to the client, the second web page having client-server functionality, the client-server functionality executable on the client resulting in a browser hosted process, the browser hosted process establishing a bidirectional exclusive communication pipe between the server resident process on the server and an operating system on the client; the exclusive communication pipe being part of the communication link, wherein the server resident process interacts with the browser hosted process through the exclusive communication pipe, and wherein the browser hosted process accesses resources of the operating system on the client, and requests an application to access the requested document; and

code means for providing the requested application to the client wherein the requested application allows the client to access the requested document.